



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-219
 UNIQUE ID NUMBER: 1PW019
 COMBUSTOR:
 ENGINE TYPE: MTF

BYPASS RATIO: 1.7
 PRESSURE RATIO (π_{00}): 20.3
 RATED THRUST (F_{00}) (kN): 96.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	15.2	41.1	73.4	18.7
AS % OF ORIGINAL LIMIT	77.8	34.8	91.1	78.1
AS % OF CAEP/2 LIMIT (NO _x)			113.9	
AS % OF CAEP/4 LIMIT (NO _x)			142.7	
AS % OF CAEP/6 LIMIT (NO _x)			162.1	
AS % OF CAEP/8 LIMIT (NO _x)			201.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.354	0.27	0.73	27.00	14.3
CLIMB OUT	85	2.2	1.085	0.42	1.20	20.80	
APPROACH	30	4.0	0.382	1.59	4.07	9.13	
IDLE	7	26.0	0.134	3.48	12.63	3.60	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			501	951	3234	6106	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				9.9	33.5	63.3	14.5
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	275-288
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	19.2

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 07/11/1983-30/11/1983

REMARKS

- All measurements by traverse.
- SCH 46-16B combustor.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)